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This diary is for you to record what you find during a week with the Electrsave electricity monitor.

Note down readings of your electricity usage each day for a week and record any interesting discoveries you make about your energy use habits.

You may also find it useful to watch how much energy different appliances in your home use.

Record your electricity meter box reading for the beginning and the end of the week below:

Thrs 2/8/07

Meter reading at beginning of week: 11540

Meter reading at end of week: 11607

You may wish to check your meter box reading each day to see if changing your energy use habits has a noticeable effect.

Please note that the Electrsave monitor should not be treated as a replacement for your electricity meter as the readings it displays will not meet the same degree of accuracy as your meter.

### daily energy use

Use the Electrsave monitor to keep an eye on daily energy use in your home. Record your findings in the table opposite.

By pressing 'MODE' you can switch between different measures of the energy you are using:

#### 1. cost in pence per hour - use this in the table

Shows how much the current level of power consumption in your home is costing you. This is based on the value you entered from your electricity bill. As power consumption rises, so will your electricity bill!

#### 2. power consumption in kw

Shows the amount of power you are currently using. So this will rise when your demand for electricity increases, for example if you boil the kettle or turn on a light.

#### 3. greenhouse gas emissions

These gases (such as carbon dioxide) are believed to play a key part in climate change. Since a major source of these gases is the generation of electricity, the Electrsave monitor calculates the effective amount of greenhouse emissions being produced by your current level of electricity use.

reducing the amount of energy we use can help combat climate change and save money at the same time!

give your readings in pence per hour 9.338p/kwh

day	typical reading for the day	any high readings do you know what caused the increase in electricity use?	when everything turned off for the night
Mon.	11579 Day 2.7p Evening 6.1		1.8p
Tues	11588 Day 2.7p Evening 6.1		1.8p
Wed End 11607	11598 Day 2.7p Evening 6.1		1.8p
start Thurs	11540 Day 2.7p Evening 6.1		1.8p
Fri.	11550 Day 2.7p Evening 6.1		1.8p
Sat	11559 Day 2.7p Evening 6.1		1.8p
Sun.	11569 Day 2.7p Evening 6.1		1.8p

## where the electricity goes...

Can you tell which appliances use the most electricity in your home? Note down the extra cost of powering these appliances - the difference between the reading on the display before and after the appliance is in use.

appliance	rise in cost (pence/hour)
Kettle (1.843 KW)	17.21p/h
Toaster (720 W)	6.72p/h
Up lighter (220 W)	2.054p/h
Microwave (1.3 KW)	12.14p/h
Vacuum cleaner (1.1 KW)	10.27p/h

what is the cost of your electricity, as you set it on the electrisave monitor?

9.338 pence per kwh  
including 5% VAT  
(Excluding standing charge)

## at the end of the week...

### maximum and minimum energy use

Having monitored your electricity use over a week, you may have noticed times at which the most and the least electricity is being used. Can you give the highest and lowest readings you saw?

highest reading	22.4	pence per hour
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lowest reading	1.8	pence per hour
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The highest reading should show just how much it can cost to power your home when a lot of appliances are in use.

The lowest reading indicates a 'base load' - the electricity still used in your home even when most appliances are switched off. Appliances left on standby can use 25% of the energy they use when on - turn them off to save energy, money and to reduce the possibility of electrical fires.



### the alarm

If you used the alarm function, what value did you set it to and did your household often exceed this?

alarm limit N/A

pence per hour
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How often was this value exceeded, setting off the alarm? Please tick the most appropriate box.

often

occasionally

never



### what you thought of the family challenge

Please tick the most appropriate box to answer the following questions.

1. How interesting did you find monitoring your electricity use for a week?

not at all interesting	1	2	3	4	5	very interesting
					✓	

2. How easy was the Electrisave monitor to install?

very difficult	1	2	3	4	5	very easy
					✓	

3. Do you think that your energy use habits may change as a result of the Family Challenge?

yes  no  unsure

Will turn off lights more

*finally, were there any particular findings that you thought were interesting or surprising?*

- 1) Microwave - used same 1.3 KW on full power & defrost
- 2) Fridge/Freezer- Electrolux TR 1241C- 210 Watts (old, two separate motors for fridge & freezer)
  1. consumption quite variable but very noticeable that it increased each time the door was opened.
  2. when defrosted, freezer was not any more efficient (so, to save energy, don't open door!)
  3. At night minimum 70W  
Day time 140-170W  
Surge:  
If unit is turned off, then on 980 W (30 sec)  
Then 360W (2min)  
Then Zero (20min)  
Then 190W etc

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- 3) Computer extras, which are always on, use a small 120Watts, printers, 1 monitor, 1 slug+2 access points
- 4) Kitchen Florescent tube doesn't have surge the urban myth was that we shouldn't turn it off & on too often because consumption would go up for 20min!  
However the tube is rated 40W and when tested as **on** for an hour it used 70W the whole time.

*thank you very much for your participation in the family challenge!*

Please return to Dr. Jacky Lawrence, Environmental management team, Warwickshire County Council, PO Box 48, Warwick, CV34 4SX. Tel: 01926 796824